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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,622	09/09/2003	Toby E. Smith	67179/03-655	2550

22206 7590 07/21/2005

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EXAMINER

MULLEN, THOMAS J

ART UNIT PAPER NUMBER

2632

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,622

Applicant(s)

SMITH ET AL.

Examiner

Thomas J. Mullen, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13, 14, 21-26 and 28-35 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-6, 8, 12, 15, 16, 18-20 and 27 is/are rejected.
- 7) ☒ Claim(s) 3, 7, 9-11 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The amendment filed 6/13/05 has been fully considered.
2. Claim 27 remains rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 21 recites, among other elements, an "optically transmissive central core" (line 7). The only disclosed embodiments having such a "core" are those of Figs. 12A-12F (wherein the devices 1210, 1212 and 1214 of Figs. 12A-12E may have a "tubing of an internally clear material such as plastic", which is considered to meet the definition of a "core"--discussed further below--and the device 1216 of Fig. 12F is described as having "core" 1240 per se--see paragraphs 0069 and 0073-0074 in the specification). However, claim 27 (which depends from claim 21) recites that the optically conductive material is a "sheet", which is clearly not a "core" based on the brief characterization of a "core" in the specification (i.e., "a light conductive plastic, an optical wave guide, etc."), and as the term "core" would be understood by those skilled in the art of optical communications; note, e.g., that an optical fiber is generally defined as having a central "core" of cylindrical cross-section, and an outer "cladding" surrounding the core. Thus, the specification and drawings fail to provide enablement for what is presently recited in claim 27.

3. Claims 1-2, 4-6, 8, 12, 15-16 and 18-20 remain rejected under 35 U.S.C. 102(e) as being anticipated by Menkedick et al. (US 6320510).

Note in Menkedick et al., apparatus comprising patient support surface 36,38 (Fig. 1); patient location sensor(s) 70,104 (see Figs. 7-8); time circuit (note "timer", col. 14, line 5); microprocessor or monitor circuit (controller 50, which is typically "microprocessor based"--col. 9, lines 27-28); and alarm (indicator lights 136, audible/visual alarm control 138, room lights 140, nurse call alarm 142, etc.--see Figs. 6-7 and col. 10, lines 39-46). Controller 50 (Fig. 7) initiates a signal indicative of a state of the patient based on output signals from the sensors (70 and/or 104) and "timer", wherein the system may operate in one of "several different modes" or environments (col. 10, lines 1-5). In the "bed sores" monitoring environment (col. 16, line 1),

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Menkedick et al. discloses a "patient turn interval" of, e.g., "two hours" (col. 16, line 3), i.e. the length of time since a patient last "changed location" is monitored; further, Menkedick et al implicitly defines "significant" patient movement by detecting when the patient moves "on the bed" from one location to another (see col. 15, line 52 to col. 16, line 10), as determined by outputs from sensor 104. In particular, sensor 104 includes multiple resistive pressure sensors 114-124 (see Fig. 8 and col. 9, lines 36-50), positioned at selected spaced locations on deck 22 of the bed, whose outputs (col. 9, lines 59-60) are used by controller 50 for "determining at least approximately a location of the patient on the support surface (36,38)" (see col. 8, lines 58-59 and col. 9, lines 60-63), i.e. controller 50 is able to determine the relative location of the patient on the bed and thus whether any "significant" movement has occurred.

Regarding claims 2, 4 and 18, Menkedick et al. teaches that "other types of sensors" may be used as sensor 104 (col. 12, lines 7-20), which types implicitly may form or comprise at least a "bed mat" and/or "strain gages".

Regarding claims 5 and 19, Menkedick et al. teaches various audible and/or visual "alarms" as discussed above.

Regarding claim 6, patient location sensor(s) 70 are "load cells...which are mounted at the four corners of the weigh frame 18" (see Fig. 3), and thus are "weight" sensors positioned "proximate to at least one of (the) bed legs" (i.e., proximate to casters 14).

Regarding claim 8, weigh frame 18 (discussed above) is inherently a "mattress support surface" (note mattress 38), the "weight" sensors 70 (also discussed above) being placed "proximate to a corner of (the) mattress support surface".

Regarding claims 12 and 20, as noted above controller 50 is typically "microprocessor based", and Menkedick et al further teaches that "the word controller is used broadly to include any type of control circuitry" necessary to carry out the intended functions (col. 9, lines 32-35), and thus controller 50 may be any of several (if not all) of the types listed, such as a "microcontroller".

4. Claims 3, 7, 9-11 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Claim 27 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action.

Claims 13-14, 21-26, 28-35 are allowed.

5. Applicant's arguments filed 6/13/05 have been fully considered but they are not persuasive.

As to the issues raised under 112(1), applicant's arguments are generally accepted as to the light source and light sensor being "in optical communication with" the first end and second end of the core, but are not accepted with respect to claim 27 for reasons discussed in paragraph 2 above.

As to Menkedick et al, applicant initially asserts that "nowhere in Menkedick (et al) is the concept of monitoring a patient for 'significant movement' disclosed or suggested" (emphasis added); however, it is pointed out that the claims use the phrase "significantly changed location" (e.g. part (c2) of claim 1), rather than the phrase "significant movement".

More particularly, applicant alleges that the term "significant" (and, by implication, the claim language "the patient...significantly changed location") must be construed based on the detailed teaching set forth in paragraph 0089 of the specification, wherein if a patient changes position and returns to the original position prior to expiration of a time period, such movement is not a "significant" movement. However, nowhere in claims 1 and 15 (or in any claims dependent therefrom) is there any mention of a patient returning to an original position or maintaining a changed position, either within or outside of a time period; nor do the claims specify any particular time/location criteria, associated with the "initiat(ed)...signal", to which the alarm is responsive (e.g., the claims do not even specify that the alarm corresponds to lack of significant movement, as opposed to excessive significant movement(s) or some other "patient-state" parameter(s)). Giving the term "significantly" its broadest reasonable interpretation, Menkedick et al clearly teaches a form of "significant" patient movement, as opposed to simply responding to any movement, as discussed in paragraph 3 above (note e.g. col. 9, line 60 to col. 10, line 4 in Menkedick et al, where a patient's relative position "on the deck" and "on the bed" is discussed; also, see col. 15, lines 52-66). Note that since the claims are not written in "means-plus-function" format, there is no basis for invoking 35 U.S.C. 112, 6th paragraph for the

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purpose of construing the claim language in the manner discussed by applicant. Also, it was held in In re Self, 213 USPQ 1,5 (CCPA 1982) that limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. Therefore, applicant's assertion that the claims are "clearly distinguishable from Menkedick (et al.)" is not persuasive.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Mullen, Jr. whose telephone number is 571-272-2965. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu, can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

TJM


Thomas J. Mullen, Jr.
Primary Examiner
Art Unit 2632